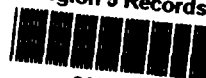




Tetra Tech EM Inc.

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EPA Region 5 Records Ctr.



268938

December 31, 2004

Mr. Brad Stimple
On-Scene Coordinator
Emergency Response Branch
U.S. Environmental Protection Agency Region 5
25089 Center Ridge Road
Westlake, Ohio 44145

**Subject: Site Assessment Report
 Stetzer Road Landfill
 Bucyrus, Crawford County, Ohio
 Technical Direction Document No. S05-0309-007
 Tetra Tech Contract No. 68-W-00-129**

Dear Mr. Stimple:

The Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) is submitting the enclosed site assessment report for the Stetzer Road Landfill site in Bucyrus, Ohio. If you have any questions or comments regarding the report or require additional copies, please contact me at (440) 234-0886, extension 228, or Therese Gioia at (312) 946-6431.

Sincerely,

Stephen A. Wolfe
Tetra Tech START Project Manager

Enclosure

cc: Lorraine Kosik, U.S. EPA START Project Officer
 Therese Gioia, Tetra Tech START Program Manager



**SITE ASSESSMENT REPORT
STETZER ROAD LANDFILL SITE
BUCYRUS, CRAWFORD COUNTY, OHIO**

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 5 Emergency Response Branch
25089 Center Ridge Road
Westlake, Ohio 44145**

TDD No.:	S05-0309-007
Date Prepared:	December 31, 2004
Contract No.:	68-W-00-129
Prepared by:	Tetra Tech EM Inc.
Tetra Tech START Project Manager:	Stephen A. Wolfe
Telephone No.:	(440) 234-0886
U.S. EPA On-Scene Coordinator:	Brad Stimple
Telephone No.:	(440) 250-1717

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1.0 INTRODUCTION

The Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) has prepared this report in accordance with the requirements of Technical Direction Document (TDD) No. S05-0309-007, which the U.S. Environmental Protection Agency (U.S. EPA) assigned to START. The scope of this TDD was to conduct site assessment activities at the Stetzer Road Landfill (SRL) site in Bucyrus, Crawford County, Ohio. Specifically, START was tasked to prepare a health and safety plan, oversee geophysical investigations, provide air monitoring, document site conditions with written logbook notes and photographs, subcontract excavator services, conduct sampling activities, subcontract sample analytical services, and prepare a site assessment report. This report discusses the site background, site assessment activities, analytical results, and potential site-related threats, and provides a summary of findings. The appendix to this report provides a photographic log for the site assessment.



2.0 SITE BACKGROUND

The site description and history are briefly presented below.

2.1 SITE DESCRIPTION

The SRL site is located at 4676 Stetzer Road, Bucyrus, Crawford County, Ohio (see Figure 1). The geographic coordinates for the site are latitude 40°49'59.3" north and longitude 82°53'2.8" west. The site consists of a 6 to 8-acre property (all landfill) and includes one storage shed located on the southwestern side of the property (see Figure 2).

The Sandusky River is located north of the site and a small pond is located to the east. A residential home is located approximately 100 yards to the south of the landfill. The site is located on a flood plain and is surrounded by wooded property.

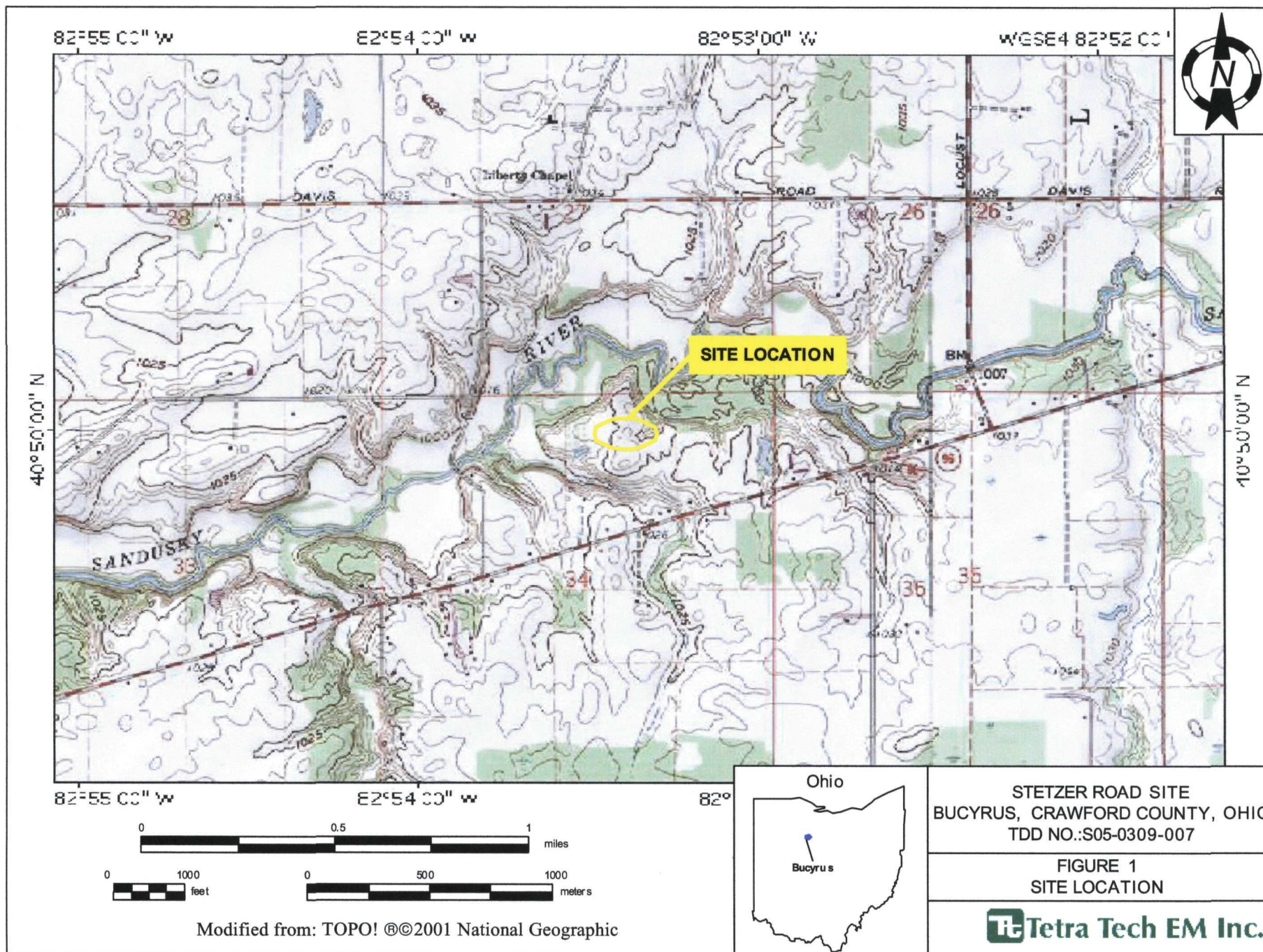
2.2 SITE HISTORY

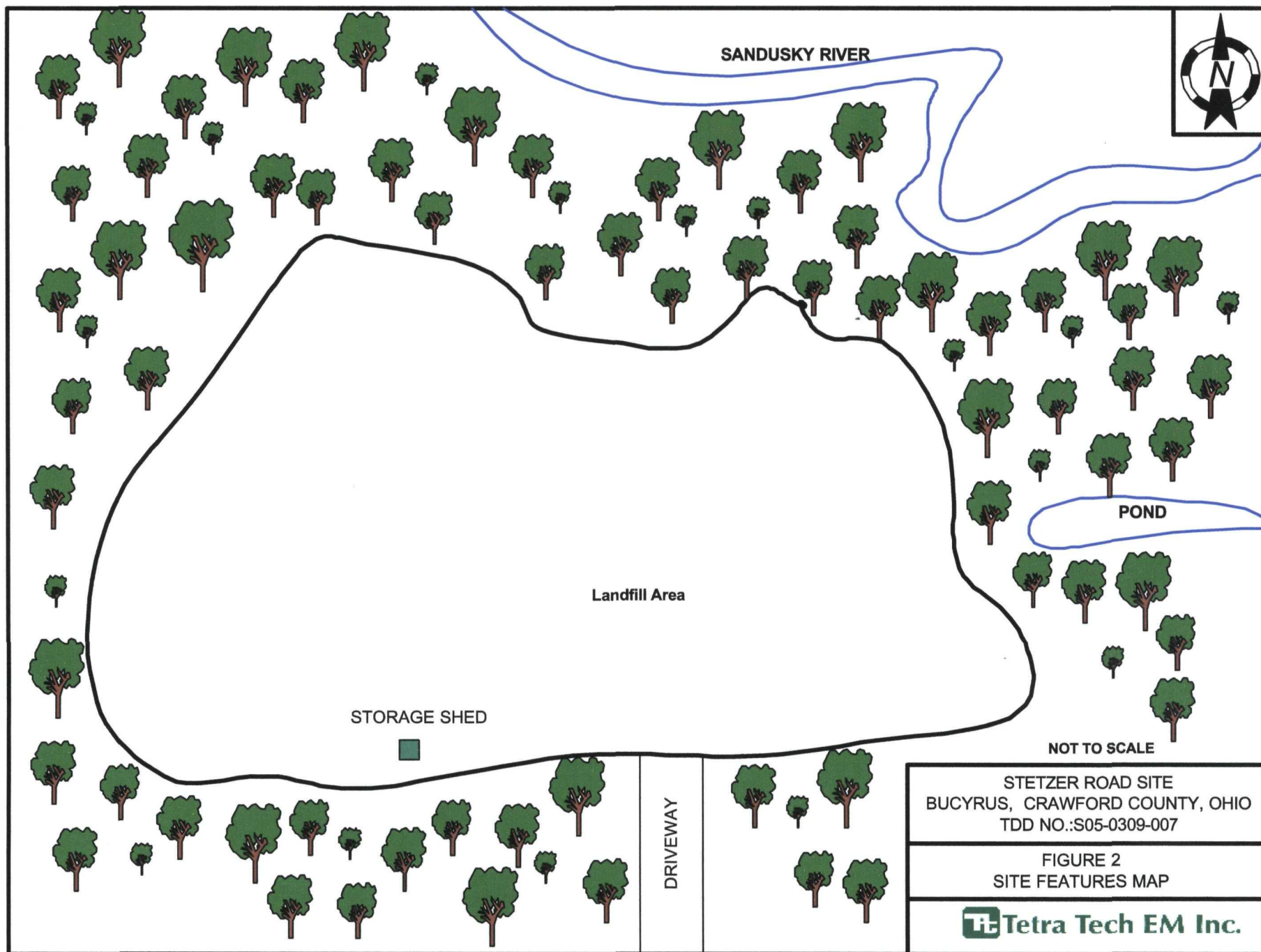
The Stetzer Road Landfill operated from approximately 1966 through 1971. During this period, it is alleged that Swan Rubber Company of Bucyrus disposed of an estimated 720 drums of waste per year for the life of the landfill. There is no historical information available as to the contents of the drums.

The site is currently owned by the Thomas Betts Company who purchased the property from Amerace in the mid 1990s. Swan Rubber Company was a subsidiary of Amerace.

A preliminary assessment (PA) was completed by the Ohio EPA in 1985. Results of the PA indicated the presence of heavy metals (lead and zinc) and TCE at concentrations above background in samples collected from site soils and leachate discharges prior to 1985.

Amerace conducted a limited site evaluation in 1986. Results of the site evaluation indicated that fill material (primarily rubber) were used to fill the area to depths of 15 feet. In addition, the study concluded that based on the analysis of observed leachate discharges, heavy metals were discharging to the Sandusky River at concentrations that significantly exceeded water quality standards. However, due to





intermittent flows the study did not anticipate significant impacts to the water quality of the river. Organics were not detected in leachate samples except for one low detection of 1,1-dichloroethane.

In 1987, Ohio EPA performed a Site Inspection (SI) at the SRL site. Heavy metals were detected above background in all shallow (0 to 2 foot) soil samples. Residential wells appeared to be unaffected by the landfill. Residential wells surrounding the site (two wells to the south, two wells southwest, one well west and one well north on the opposite side of the river from the site) were sampled and analysis of the samples indicated the presence of contaminants. The contaminants included; low levels of toluene (3 wells), lead (57 micrograms per liter (ug/l) in one well), cadmium (0.15 to 2.0 ug/l in 3 wells), and zinc (greater than 1,000 ug/l in one well). No recommendations were made in the SI report regarding future work.

In 1994, Ohio EPA's Site Investigation Field Unit (SIFU) performed a Focused Site Inspection Prioritization (FSIP). The FSIP score was 50.16 based on a threat of release to drinking water.

In January of 2003, an employee of the United States Department of Agriculture-Soil and Water Conservation District (USDA) for Seneca County, contacted the Ohio EPA regarding the SRL. This employee formerly worked for the USDA in the Crawford County area in the late 1960s and 1970s and recalled seeing numerous drums being placed in the flood plain of the Sandusky River by the Swan Rubber Company of Bucyrus. The flood plain is along the eastern side of the property.

Ohio EPA made a site visit in March, 2003 to assess site conditions and evaluate potential threats. A representative of the current site owner was present. No leachate outbreaks were observed during the site visit; however erosion of the slopes of the north and northeastern border of the site presented a cause for concern.

Ohio EPA formally requested U.S. EPA assistance on August 15, 2003 in assessing the SRL site.



3.0 SITE ASSESSMENT ACTIVITIES

On October 7, 2003, U.S. EPA, Ohio EPA, START and a representative from the Potentially Responsible Party (PRP) was on site to conduct a geophysical survey. A magnetometer was used to survey the site and areas were marked with a red flag (readings less than 1,000 units) or a white flag (readings greater than 1,000 units). See Figure 3 for results of the geophysical survey.

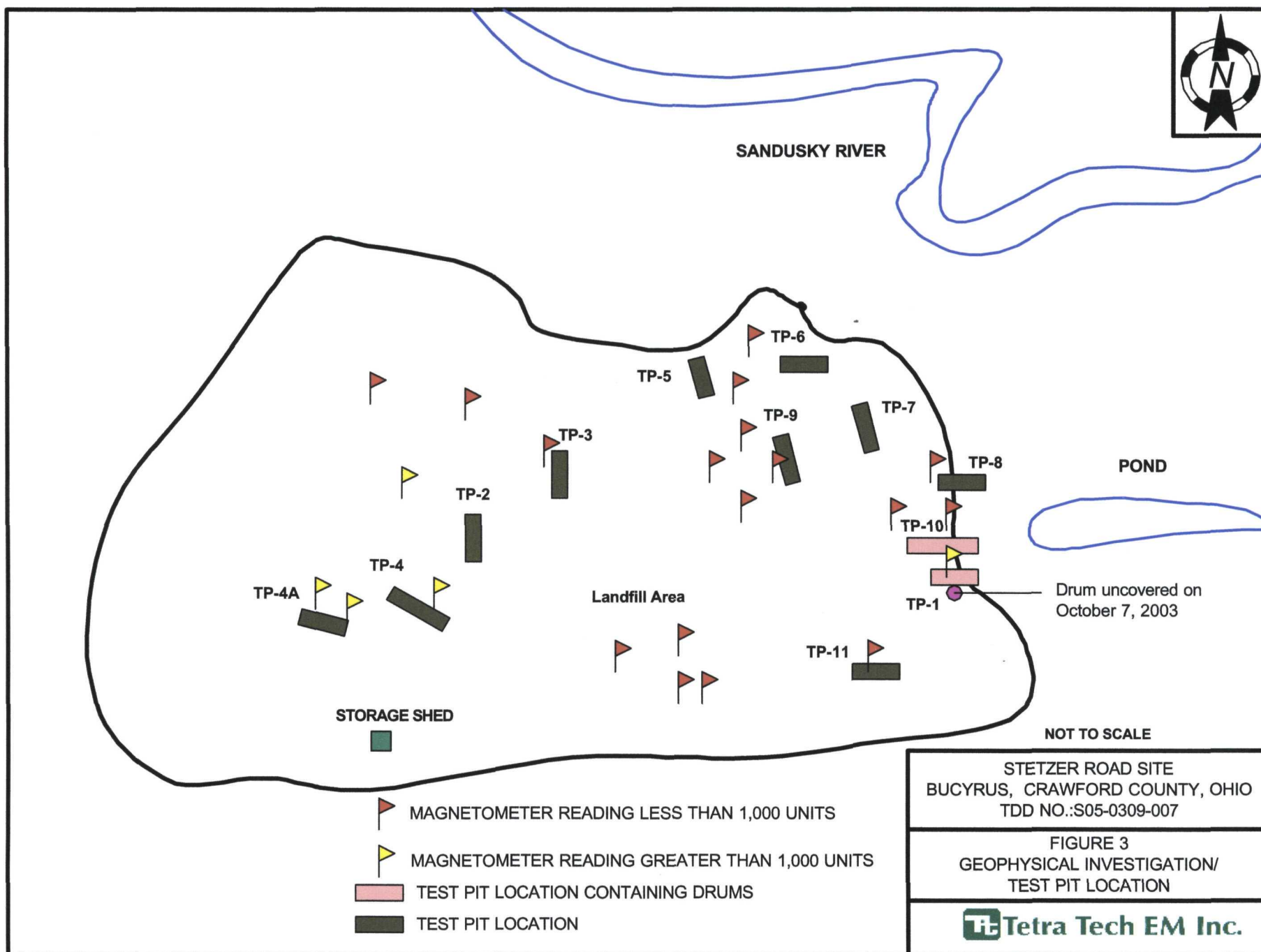
A metal detector was used to survey the areas identified as anomalies and results indicated that the marked areas did indeed contain high amounts of metal. A shovel was used to uncover a drum on the east side of the property in an area that was identified by both the magnetometer and the metal detector.

On December 17 and 18, 2003, U.S. EPA, Ohio EPA, START and the PRP's representative were on site to dig test pits in the areas identified on October 7, 2003. Inland Waters of Ohio was subcontracted by START to perform the excavation services.

A total of twelve test pits were excavated on the site (Figure 3). All test pits were dug until native soil was encountered or until the 10-foot depth limit of the excavator was reached. The test pits contained mostly rubber hoses as fill material with some plastic wrapping material. A large metal cable was uncovered at 3 feet below ground surface (bgs) in test pits 4 and 4a, and digging stopped at approximately 5 feet bgs when soil was encountered. The ends of the cable could not be located and seemed to run in a northeast/southwest direction. A total of 13 crushed and deteriorated drums were found in test pits 1 and 10, which were located on the eastern side of the property. The drums were removed from the test pits and placed on visqueen for further evaluation.

Most of the drums were empty; however, several drums contained either a white or purple caulk-like material. One composite sample of the white material (DS-1) and one sample of the purple material found in the drums (DS-2) was collected by START. One groundwater sample was collected by START from test pit 1. Two composite soil samples (SS-1 and SS-2) from the soil excavated with the drums were collected by START.





START conducted air monitoring during all site assessment activities with a Ludlum Micro-R radiation meter, a TVA-1000 combination flame-ionization detector (FID) and photo-ionization detector (PID) and a Marine Safety Appliance Passport (MSA) meter. The MSA meter contained a lower explosive limit (LEL) meter, an oxygen (O₂) sensor, a hydrogen sulfide (H₂S) sensor and a carbon monoxide (CO) sensor. No readings above background were detected on any of the air monitoring equipment during the site assessment activities. The headspace of composite samples DS-1 and DS-2 was checked with the TVA-1000 and a reading of 250 units was obtained on the FID for DS-1 and 65 units was obtained for DS-2.

All test pits were backfilled, and the drums containing material were overpacked (3 to 5 overpacks total) and placed near the storage shed pending laboratory analysis.

At the request of the OSC, samples DS-1 and DS-2 was combined into one sample prior to delivering the sample to the laboratory. The excess sample from the compositing was stored in a refrigerator for disposal purposes. The composite sample was analyzed for the D-listed wastes (D004-D043) and the analysis consisted of Total Characteristic Leachate Property (TCLP) metals, TCLP volatiles, TCLP semi-volatiles, TCLP mercury, TCLP pesticides, TCLP herbicides, flashpoint, ignitability, reactive sulfides, and corrosivity.

Both soil samples were analyzed for volatiles, semi-volatiles, pesticides, polychlorinated biphenyls, metals, mercury, reactive sulfides, and corrosivity. The water sample was analyzed for metals and mercury.

All samples were submitted to Severn Trent Laboratories, Inc., North Canton, Ohio on December 22, 2003.

4.0 ANALYTICAL RESULTS

The samples collected by START were to be analyzed for disposal purposes only; therefore, the OSC requested that START not perform data validation on the analytical results. Since no data validation was performed on the analytical results, the results are not discussed in detail in this report. The complete data package provided by Severn Trent Laboratories, including supporting documentation, is available in the site files.

The analytical results indicated that the composite sample of the waste material was hazardous for lead and cadmium. The Total Characteristic Leachate Property (TCLP) result for lead was 7.0 milligrams per liter (mg/l) and the TCLP result for cadmium was 3.2 mg/l. TCLP regulations for wastes in a landfill are 5.0 mg/l for lead and 1.0 mg/l for cadmium.

The analytical results for the soil samples did not indicate any contaminants above U.S. EPA removal action levels.

5.0 SUMMARY

No evidence of a large quantity of drums (more than 3,500) that were allegedly buried at the SRL site were uncovered during the site assessment performed by U.S. EPA and START. U.S. EPA reviewed the analytical results of the samples collected and determined that the analytes detected did not exceed any U.S. EPA removal action levels for soil and water.

Based on the results of the site assessment, U.S. EPA will not pursue any further action at the SRL site.

The PRP (Thomas Betts company) will properly dispose of the drums that were uncovered and overpacked during the site assessment.



APPENDIX
PHOTOGRAPHIC LOG
(Five Pages)



Photograph No. 1 **Date:** October 7, 2003
TDD No.: S05-0309-007 **Orientation:** East
Location: Stetzer Road Landfill site
Subject: U.S. EPA personnel performing a geophysical survey with a magnetometer



Photograph No. 2 **Date:** October 7, 2003
TDD No.: S05-0309-007 **Orientation:** Down
Location: Stetzer Road Landfill site
Subject: Drum that was uncovered on the east side of the property



Photograph No. 3 **Date:** December 17, 2003
TDD No.: S05-0309-007 **Orientation:** North
Location: Stetzer Road Landfill site
Subject: Excavating a test pit



Photograph No. 4 **Date:** December 17, 2003
TDD No.: S05-0309-007 **Orientation:** Down
Location: Stetzer Road landfill site
Subject: Metal cable that was uncovered in test pits 4 and 4a



Photograph No. 5 **Date:** December 17, 2003
TDD No.: S05-0309-007 **Orientation:** Down
Location: Stetzer Road Landfill site
Subject: Excavating a test pit



Photograph No. 6 **Date:** December 17, 2003
TDD No.: S05-0309-007 **Orientation:** Down
Location: Stetzer Road Landfill site
Subject: Drum leaking white material



Photograph No. 7 **Date:** December 18, 2003
TDD No.: S05-0309-007 **Orientation:** East
Location: Stetzer Road Landfill site
Subject: Excavating a test pit



Photograph No. 8 **Date:** December 18, 2003
TDD No.: S05-0309-007 **Orientation:** Down
Location: Stetzer Road Landfill site
Subject: Excavated half-drum filled with a white material



Photograph No. 9 **Date:** December 18, 2003
TDD No.: S05-0309-007 **Orientation:** South
Location: Stetzer Road Landfill site
Subject: Excavated drums staged on plastic sheeting.